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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,367	07/05/2004	Da-Shuang Kuan	13371-US-PA	4366

31561 7590 07/24/2006

JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE
7 FLOOR-1, NO. 100
ROOSEVELT ROAD, SECTION 2
TAIPEI, 100
TAIWAN

EXAMINER

CHIEN, LUCY P

ART UNIT

PAPER NUMBER

2871

DATE MAILED: 07/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/710,367

Applicant(s)

KUAN ET AL.

Examiner

Lucy P. Chien

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) 3 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

Response to Arguments

Applicant's arguments with respect to claim 1,2, 4-7 have been considered but are moot in view of the new ground(s) of rejection.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1,2,5-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Sandberg et al (US 20020001056).

Sandberg et al discloses (Fig. 6A) An active component array substrate (2, abstract); a pixel electrode layer (4), disposed over the active component array substrate (2); an opposite substrate (10), disposed opposite to the active component array substrate (2); A common electrode layer (12), disposed over the opposite substrate (10); Two inorganic alignment films (14,8, Page 7, [0082]), disposed over the pixel electrode layer (4) and the common electrode layer (12) respectively; and Sandberg et al discloses that a nematic liquid crystal with pleochroic dye which is a negative dielectric anisotropic liquid crystal layer (18 (Page 1, [0015]) could be used disposed between the two inorganic alignments films (14,8), and aligned parallel to the inorganic alignment films. Regarding Claim 2, The active component array substrate comprises a thin film transistor array substrate (Page 1, [0017]). Regarding Claim 5, A

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material of the inorganic alignment film comprises silicon oxide (Page 7, [0082]).

Regarding Claim 7, A material of the common electrode layer comprises indium tin oxide (Page 7, [0089]).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 4, are rejected under 35 U.S.C. 103(a) as being unpatentable over Sandberg et al (US 20020001056) in view of Hachisu et al (US 20020113928).

Sandberg discloses everything disclosed above.

Sandberg does not disclose specifically using a ferro-electric liquid crystal layer.

Hachisu et al discloses (Page 1, [0009]) the negative dielectric anisotropic liquid crystal layer such as a ferro-electric liquid crystal layer to provide spontaneous polarization and thus demonstrates a very fast response speed thus providing excellent viewing angle characteristics.

It is obvious to one skilled in the art to provide a negative dielectric anisotropic liquid crystal layer such as a ferro-electric liquid crystal layer of Hachisu et al to provide spontaneous polarization and thus demonstrates a very fast response speed thus providing excellent viewing angle characteristics (Page 1, [0009]) to the liquid crystal of Sandberg's display.

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Claim 6 rejected under 35 U.S.C. 103(a) as being unpatentable over Sandberg et al (US 20020001056) in view of Kawasaki (US 5082353).

Regarding Claim 6.

Sandberg et al does not disclose the opposite substrate comprises a color filter substrate.

Kawasaki discloses (Column 5, rows 47-50) the opposite substrate comprises a color filter substrate to achieve a color display with a high color-reproducibility and in a high image contrast.

It would have been obvious to one of ordinary skilled in the art to modify Sandberg et al to include Kawasaki's color filter motivated by the desire to achieve a color display with a high color-reproducibility and in a high image contrast (Column 5, rows 47-50).

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lucy P. Chien whose telephone number is 571-272-8579. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on (571)272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Lucy P Chien
Examiner
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ANDREW SCHECHTER
PRIMARY EXAMINER